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# WINTER WHEAT

## 1943-44

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**A** FEW NEW STRAINS and varieties of winter wheat are introduced into the Illinois trials each year. Progressive farmers are always interested in these entries, especially if they give promise of surpassing the old ones in any important respect. There is also interest in knowing how the older varieties stand up to the hardships or take advantage of the favorable environment of the current year. The three tables included here show what happened in the winter-wheat tests in 1943-44.

The tables show also how each variety included previous to 1943-44 has performed in comparison with all other varieties grown during the same years. A yield markedly above the average of all varieties, especially if the variety has been in the test for a number of years, is believed to be a good indication of a variety's inherent ability to yield well.

High yields should not, however, be the sole basis for choosing a variety. Bread-making quality, resistance to lodging, and the reaction to mosaic and other diseases are very important. Information on these points also will be found in the tables.

### VARIETIES RECOMMENDED FOR ILLINOIS

**NORTHERN ILLINOIS.** MARMIN and WISCONSIN 2 are good varieties for north-central and northern Illinois.

**CENTRAL ILLINOIS.** Hard wheats for mosaic-free land in central Illinois include TENMARQ, BRILL, PAWNEE, and WISCONSIN 2. Soft wheats for mosaic-infested land in south-central Illinois include PRAIRIE, WABASH, and FAIRFIELD.

**SOUTHERN ILLINOIS.** Only soft wheats should be grown in southern Illinois. Because of their yielding ability and their quality of grain, FULCASTER, WABASH, PRAIRIE, FAIRFIELD, and FULHIO are good varieties for this section.

Table 1.—NORTHERN ILLINOIS (DeKalb and Mt. Morris): Performance of Winter Wheat Varieties Grown in 1943-44

Rank	Variety	Average yields during years grown				Performance in 1943-44				Characteristics			
		Above (+) or below (-) average of all varieties	Yield per acre	Years grown	Yield per acre	Rank in yield	Test weight per bushel	Plants erect at harvest	Class	Grain quality	Reaction to mosaic <sup>a</sup>	Color of chaff	Bearded or beardless
		bu.	bu.		bu.		lb.	per ct.					
1	Blackhawk	+7.2	34.8	2	32.1	2	59.0	91.6	Soft	Good	Suscep.	White	Bearded
2	Kawvale	+4.0	28.4	8	32.1	2	55.7	87.0	Semihard	Medium	Inter.	White	Bearded
3	Minturki	+2.6	30.1	17	29.9	7	58.6	85.2	Semihard	Medium	Inter.	White	Bearded
4	Loturk	+2.5	28.9	12	31.0	4	58.6	84.5	Hard	Good	Suscep.	White	Bearded
5	Marmm	+2.2	30.6	3	28.9	10	57.7	86.3	Hard	Good	Suscep.	White	Bearded
6	Wisconsin 2	+1.0	28.4	16	30.7	6	57.8	86.7	Hard	Good	Inter.	White	Bearded
7	Illinois 37-1146	+1.5	25.9	4	30.9	5	58.6	95.3	Hard	Good	Resistant	Brown	Bearded
8	Turkey	+3	29.2	19	29.6	8	58.3	84.2	Hard	Good	Inter.	White	Bearded
9	Prairie	+3	29.6 <sup>b</sup>	5	35.3	1	57.2	91.3	Soft	Excellent	Resistant	Brown	Bearded
10	Ilred	0	30.6	18	29.0	9	58.5	81.8	Hard	Good	Inter.	White	Bearded
11	Brill	0	27.2	13	28.7	11	56.8	76.0	Hard	Good	Inter.	Brown	Bearded
12	Red Chief	-3	29.4	2	28.3	14	60.0	92.3	Hard	Medium	Suscep.	Brown	Beardless
13	Tennmarq	-3	27.7	12	23.7	17	54.6	83.0	Hard	Excellent	Suscep.	White	Bearded
14	Cheyenne	-1.0	27.2	12	28.4	13	56.0	92.6	Hard	Medium	Suscep.	White	Bearded
15	Clarkan	-1.2	30.0	6	28.6	12	58.7	92.0	Soft	Good	Suscep.	White	Beardless
16	Pawnee	-1.6	26.0	2	27.1	15	56.2	89.2	Hard	Excellent	Suscep.	White	Bearded
17	Comanche	-4.3	23.3	2	25.6	16	58.0	88.6	Hard	Excellent	Inter.	White	Bearded
	Average	.....	.....	..	29.4	..	57.4	87.5	.....	.....	.....	.....	.....
	Difference necessary for significance	.....	.....	..	2.0	..	.....	.....	.....	.....	.....	.....	.....

<sup>a</sup>Inter. = intermediate, Suscep. = susceptible.

<sup>b</sup>Two strains of Prairie are included in this five-year average. Prior to 1944 the strain used was Prairie C.I. 12069. In 1944 Prairie C.I. 12371 was used. It is the latter that is being grown under certification in Illinois.

Table 2.—CENTRAL ILLINOIS (Urbana): Performance of Winter Wheat Varieties Grown in 1943-44

Rank	Variety	Average yields during years grown				Performance in 1943-44				Characteristics				
		Above (+) or below (-) average of all varieties		Yield per acre	Years grown	Yield per acre	Rank in yield	Test weight per bushel	Plants erect at harvest	Class	Grain quality	Reaction to mosaic <sup>a</sup>	Color of chaff	Bearded or beardless
		bu.	bu.											
1	Kawvale	+6.3	40.0	9	38.5	2	59.1	99	per cent.	Semihard	Medium	Inter.	White	Bearded
2	Purdue 14	+5.8	41.2	1	41.2	1	60.0	95		Hard	Good	Resistant	White	Bearded
3	Blackhawk	+4.0	39.7	2	37.2	6	59.0	89		Soft	Good	Suscep.	White	Bearded
4	Illinois D 85	+3.6	33.4	4	35.7	10	61.3	97		Soft	Good	Resistant	White	Bearded
5	Tennmarq	+3.4	37.6	14	35.0	13	59.5	87		Hard	Excellent	Suscep.	White	Bearded
6	Brill	+3.2	37.4	14	35.0	13	60.0	87		Hard	Good	Inter.	Brown	Bearded
7	Pawnee	+2.4	38.1	2	37.4	4	60.0	94		Hard	Excellent	Suscep.	White	Bearded
8	Clark	+2.3	37.1	7	34.6	18	62.0	99		Soft	Good	Suscep.	White	Beardless
9	Illinois 37-1146	+2.3	33.3	5	33.9	22	59.6	96		Hard	Good	Resistant	Brown	Bearded
10	Wisconsin 2	+1.7	36.4	16	36.1	8	59.3	86		Hard	Good	Inter.	White	Bearded
10	Cheyenne	+1.7	35.5	13	36.8	7	60.1	95		Hard	Medium	Suscep.	White	Bearded
12	Iotuk	+1.4	36.2	13	37.3	5	60.2	93		Hard	Excellent	Suscep.	White	Bearded
13	Prairie	+1.2	33.7 <sup>b</sup>	6	37.6	3	59.0	99		Soft	Good	Resistant	Brown	Bearded
14	Ilred	+1.0	36.1	17	35.0	13	59.5	88		Hard	Good	Inter.	White	Bearded
15	Turkey	+ .5	36.4	18	34.1	20	59.8	79		Hard	Good	Inter.	White	Bearded
15	Wabash	+ .5	34.3	9	31.9	24	59.0	92		Soft	Good	Resistant	White	Beardless
17	Fairfield	+ .3	31.5	4	35.1	12	57.5	97		Soft	Excellent	Resistant	White	Beardless
18	Marmin	+ .2	31.4	3	34.8	17	60.3	90		Hard	Good	Suscep.	White	Bearded
18	Comanche	+ .2	35.9	2	35.4	11	59.1	84		Hard	Excellent	Inter.	White	Bearded
20	Goens	0	35.7	2	31.6	25	59.8	99		Soft	Good	Resistant	Brown	Bearded
21	Minturki	- .5	35.1	14	34.9	16	60.1	86		Semihard	Medium	Inter.	White	Bearded
22	Trumbull-Fultz C.I. 12220	-1.0	34.4	1	34.4	19	58.1	98		Soft	Excellent	Resistant	White	Beardless
23	Red Chief	-1.4	29.8	3	32.0	23	62.5	94		Hard	Medium	Suscep.	Brown	Beardless
24	Trumbull	-2.3	33.7	11	34.1	20	58.0	98		Soft	Excellent	Resistant	White	Beardless
24	Fulcaster	-2.3	31.9	10	35.8	9	60.0	88		Soft	Good	Resistant	White	Bearded
Average		.....	.....	.....	.....	35.4	..	59.7	.....	.....	.....	.....	.....	.....
Difference necessary for significance		.....	.....	.....	.....	2.1	..	.....	.....	.....	.....	.....	.....	.....

<sup>a</sup>Inter. = intermediate, Suscep. = susceptible.<sup>b</sup>Two strains of Prairie are included in this six-year average. Prior to 1944 the strain used was Prairie C.I. 12069. In 1944 Prairie C.I. 12371 was used. It is the latter that is being grown under certification in Illinois.

Table 3.—SOUTHWESTERN ILLINOIS (Alhambra): Performance of Winter Wheat Varieties Grown in 1943-44

Rank	Variety	Average yields during years grown				Performance in 1943-44				Characteristics				
		Above (+)		Yield per acre	Years grown	Yield per acre	Rank in yield	Test weight per bushel	Plants erect at harvest	Class	Grain quality	Reaction to mosaic <sup>a</sup>	Color of chaff	Bearded or beardless
		bu.	bu.											
1	Newcaster (Illinois 42-608)	+5.1	31.0	1	31.0	1	58.5	87.5	Soft	Good	Resistant	White	Bearded	
2	Fulcaster	+3.4	25.0	18	27.1	3	58.9	98.3	Soft	Good	Resistant	White	Bearded	
3	Brill	+2.0	23.8	13	25.9	8	59.2	90.8	Hard	Good	Inter.	Brown	Bearded	
4	Illinois D 85	+1.9	17.5	4	30.6	2	59.6	97.5	Soft	Good	Resistant	White	Bearded	
5	Clarkan	+1.0	21.1	7	24.5	11	60.7	96.7	Soft	Good	Suscep.	White	Beardless	
6	Blackhawk	+ .9	20.2	2	26.6	4	58.6	95.6	Soft	Good	Suscep.	White	Bearded	
7	Wabash	+ .7	22.7	9	25.4	9	58.8	92.5	Soft	Good	Resistant	White	Beardless	
7	Trumbull-Fultz C.I. 12220	+ .7	26.6	1	26.6	4	56.8	96.7	Soft	Excellent	Resistant	White	Beardless	
9	Fairfield	+ .5	16.1	4	24.0	12	56.0	100.0	Soft	Excellent	Resistant	White	Beardless	
10	Fulvio	- .1	22.0	17	20.0	14	55.8	100.0	Soft	Excellent	Resistant	White	Beardless	
10	Trumbull	- .1	21.2	11	23.8	13	57.0	98.3	Soft	Excellent	Resistant	White	Beardless	
12	Goens	- .4	13.3	3	26.0	7	59.3	97.5	Soft	Good	Resistant	Brown	Bearded	
13	Cornell 595 C20-1-5	- .5	18.8	2	24.9	10	54.5	100.0	White	Good	Suscep.	Brown	Beardless	
14	Prairie	-1.0	18.4 <sup>b</sup>	5	26.2	6	58.1	99.2	Soft	Excellent	Resistant	Brown	Bearded	
Average		.....	.....	..	25.9	..	58.0	96.5	.....	.....	.....	.....	.....	
Difference necessary for significance		.....	.....	.....	3.5	.....	.....	.....	.....	.....	.....	.....	.....	

<sup>a</sup>Inter. = intermediate. Suscep. = susceptible.<sup>b</sup>Two strains of Prairie are included in this five-year average. Prior to 1944 the strain used was Prairie C.I. 12069. In 1944 Prairie C.I. 12371 was used. It is the latter that is being grown under certification in Illinois.